



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/826,765

04/16/2004

Emil Maghakian

47717/276247

1225

826

7590

05/30/2006

ALSTON & BIRD LLP  
BANK OF AMERICA PLAZA  
101 SOUTH TRYON STREET, SUITE 4000  
CHARLOTTE, NC 28280-4000

EXAMINER

FEIGINS, KRISTAL J

ART UNIT

PAPER NUMBER

2861

DATE MAILED: 05/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/826,765	Applicant(s) MAGHAKIAN, EMIL	
	Examiner K. Feggins	Art Unit 2861	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,4-15,18-32,34,35,38-41 and 44-49 is/are rejected.
- 7) ☒ Claim(s) 2,3,16,17,33,36,37,42,43,50 and 51 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)            |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/6/06 &amp; 4/16/04</u> | 6) <input type="checkbox"/> Other: ____  |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1, 4-29, 31, 32, 34, 35, 38-41, 44-49 are rejected under 35 U.S.C. 102(b) as being anticipated by Cremon et al. (US 20020191998 A1).

**Cremon et al. disclose the following:**

\* regarding claim 1, a media supply apparatus for maintaining a transfer ribbon comprising a spool/roll/ (para 64);

\* a transfer ribbon defining first and second distal ends and being at least partially wound on the spool (para 64, figs 2-6);

\* a wireless device /RFID tag/ disposed on said transfer ribbon, said wireless device having a memory configured to store data and an antenna configured to at least transmit the data stored in the memory to a remote location (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

\* regarding claim 4, wherein said transfer ribbon is a dye carrier with at least one thermal transfer dye disposed thereon (para 51-53 & 55).

\* regarding claim 5, wherein said wireless device is programmed with data corresponding to a characteristic of said transfer ribbon (para 39, 51-53, 55).

\* regarding claim 6, further comprising a housing defining an interior space, the spool being disposed in the interior space of the housing and said wireless device being configured to receive a wireless signal transmitted through said housing (para 51-53, 55, 59-60, fig 10).

\* regarding claims 7, 23 & 40, wherein said wireless device is selected from the group consisting of RFID, optical, capacitive sense element, and magnetic sense element (figs 2, 6, 8 & 10).

\* regarding claim 8, an apparatus for supplying a transfer ribbon, the apparatus comprising (Abstract, figs 3-5, 10);

\* a media of a transfer ribbon, said media defining first and second distal ends (figs 3-5, 10);

\* a first wireless device disposed on said media, said wireless device having a memory configured to store data and an antenna configured to receive a radio frequency signal for programming the memory (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

Art Unit: 2861

\* regarding claim 9, further comprising a spool, wherein said media is at least partially wound on the spool (fig 10).

\* regarding claims 10 & 44, wherein an outer surface of said spool defines a recess for at least partially receiving the wireless device (figs 3-6).

\* regarding claim 11, wherein an outer surface of said spool defines an annular groove for at least partially receiving the wireless device (figs 2-6).

\* regarding claim 12, wherein said spool defines a bore extending at least partially therethrough and an aperture extending from an outer surface of said spool to the bore, said wireless device being configured on said spool such that said wireless device can communicate through the aperture (figs 3-6).

\* regarding claim 13, wherein a portion of the spool is configured to be deformed such that said spool at least partially receives said wireless device (figs 2-6).

\* regarding claim 14, further comprising a housing defining an interior space, said spool being disposed in the interior space of said housing and said wireless device being configured to receive a wireless signal transmitted through said housing.

\* regarding claims 15 & 24, further comprising a second wireless device mounted to said spool and having a memory configured to store data and an antenna configured to receive a radio frequency signal for programming the memory of said second wireless device (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

\* regarding claim 16, wherein said media is disposed in a wound configuration such that the first end is disposed radially inward of a plurality of wound layers of said media and the second end is disposed radially outward of the plurality of wound layers of said media, said wireless device being disposed on said media proximate to the first end.

\* regarding claim 17, wherein said media is disposed in a wound configuration such that the first end is disposed radially inward of a plurality of wound layers of said media and the second end is disposed radially outward of the plurality of wound layers of said media, said wireless device being disposed on said media proximate to the second end.

\* regarding claim 18, further comprising a structure and first and second spools rotatably mounted to said structure, said media being at least partially wound on said first spool and configured to be transferred therefrom to said second spool/inherent features of ribbon on a spool/ (fig 10).

Art Unit: 2861

\* regarding claim 19, wherein said wireless device is programmed with data corresponding to a characteristic of said media (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

\* regarding claim 20, further comprising an overlay/ribbon/ adhered to said media with said wireless device disposed between said overlay/ribbon/ and said media, wherein said overlay/ribbon/ is a label with indicia thereon (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

\* regarding claim 21, wherein said media includes multiple plies and said wireless device is located between two of the plies of said media (figs 2-6).

\* regarding claims 22 & 39, wherein said wireless device is a radio frequency identification device/RFID/ configured to receive data via a radio frequency signal (figs 2, 6, 8, 10).

\* regarding claim 25, wherein said first and second wireless devices are configured to receive radio frequency signals from transceivers at different locations (figs 2, 6, 8, 10).

\* regarding claim 26, wherein said first and second wireless devices are configured to store different data (figs 2, 6, 8, 10, para 57).

\* regarding claim 27, for use in a thermal transfer printer, a thermal transfer ribbon having a radio frequency identification device attached thereto (figs 2, 6, 8, 10).

\* regarding claim 28, for use in a thermal transfer printer, a thermal transfer ribbon assembly including a rotatable hollow core and a roll of thermal transfer ribbon wound on the hollow core, the ribbon having attached thereto a radio frequency identification device (figs 3-5).

\* regarding claim 29, the combination comprising a thermal transfer ribbon having a radio frequency device attached thereto (figs 2-6 & 10);

\* a transceiver configured to communicate with the radio frequency identification device (figs 2-6 & 10).

\* regarding claim 31, a media supply apparatus (Abstract);

\* a spool (figs 2-6 & 10);

\* a media defining first and second distal ends and being at least partially wound on the spool (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10);

\* a wireless device disposed on said media, said wireless device having a memory configured to store data and an antenna configured to at least transmit the data stored in the memory to a remote location, wherein said spool defines a recess for at



Art Unit: 2861

least partially receiving said wireless device therein (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

\* regarding claim 32, wherein an outer surface of said spool defines an annular groove for at least partially receiving the wireless device.

\* regarding claims 34 & 45, wherein a portion of said spool is configured to be deformed such that said spool at least partially receives said wireless device (figs 3-6).

\* regarding claim 35, further comprising a housing defining an interior space, said spool being disposed in the interior space of said housing and said wireless device being configured to receive a wireless signal transmitted through said housing (figs 9-11).

\* regarding claim 38, wherein said media is selected from the group comprising paper, ribbon, label, laminate film, and wire (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10);

\* regarding claim 41, a method of manufacturing a supply apparatus/method disclose by apparatus/ (Abstract) the method comprising winding media of a transfer ribbon onto a spool, said media defining first and second distal ends/inherent feature of media; having an beginning and an end);

Art Unit: 2861

- \* disposing a wireless device on the media (figs 2-6);

- \* programming a memory of the wireless device with data and retrieving the data from the memory of the wireless device (para 38, 51-53, 55, 64, 69, 78-79, figs 2-6 & 10).

- \* regarding claim 46, further comprising disposing a wireless device on the spool, such that a wireless device is located by on the media and on the spool (figs 3-5);

- \* programming a memory of the wireless device on the spool; and retrieving the data from the memory of the wireless device on the spool (figs 2, 6, & 8, para 38, 51-53, 55, 64, 69, 78-79).

- \* regarding claim 47, wherein at least one of said programming and retrieving steps comprises communicating with a select one of the wireless devices located on the media and the spool (Abstract, figs 2-6, para 38, 51-53, 55, 64, 69, 78-79).

- \* regarding claim 48, wherein said first and second programming steps comprise storing different data in the wireless devices (figs 2-6, para 38, 51-53, 55, 64, 69, 78-79).

- \* regarding claim 49, the method comprising winding a media of a transfer ribbon about itself, said media defining first and second distal ends; and disposing a wireless device on the media (figs 2-6 & 10);

\* programming a memory of the identification device with data; and retrieving the data from the memory of the identification device (figs 2, 6, & 8, para 38, 51-53, 55, 64, 69, 78-79).

3. Claim 30 is rejected under 35 U.S.C. 102(b) as being anticipated by Funayama et al. (US 6,593,952 B1).

**Funayama et al. (US 6,593,952 B1) disclose the following:**

\* regarding claim 30, the combination comprising a thermal transfer ribbon assembly including a rotatable hollow roll and a roll of thermal transfer ribbon wound on the hollow core, the ribbon having attached thereto a radio frequency identification device (figs 4 & 15);

\* a transceiver configured to communicate with the radio frequency identification device and including an antenna positioned within the hollow core of the assembly in close proximity to the radio frequency identification device (fig 15 & 18D).

***Allowable Subject Matter***

4. Claims 2-3, 16-17, 36-37, 42-43, 50-51 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: The primary reason for indicating allowable subject matter of claims allowance of claims 2, 16 & 36 is the inclusion of the limitations of a media supply apparatus that

Art Unit: 2861

includes a wireless device being disposed on the transfer ribbon proximate to the first end such that the wireless device is disposed between the spool and the plurality of wound layers of the transfer ribbon. It is this limitation found in the claims, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for indicating allowable subject matter of claims allowance of claims 3, 17 & 37 is the inclusion of the limitations of a media supply apparatus that includes a wireless device being disposed on the transfer ribbon proximate to the second end such that the plurality of wound layers of the transfer ribbon are disposed between the spool and the wireless device. It is this limitation found in the claims, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for indicating allowable subject matter of claims allowance of claims 33 is the inclusion of the limitations of a media supply apparatus that includes a spool that defines a bore extending at least partially therethrough and an aperture extending from an outer surface of said spool to the bore, the wireless device being configured on the spool such that the wireless device can communicate through the aperture. It is this limitation found in the claims, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for indicating allowable subject matter of claims 42 & 50 is the inclusion of a method steps of a supply apparatus that includes disposing a wireless

Art Unit: 2861

device being disposed on said media proximate to the first end such that the wireless device is disposed between the spool and the plurality of wound layers of said media. It is this method step found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

The primary reason for indicating allowable subject matter of claims 43 & 51 is the inclusion of a method steps of a supply apparatus that includes disposing the identification device on the media proximate to the second end such that the plurality of wound layers of the media are disposed between the spool and identification device. It is this method step found in the claim, as it is claimed in the combination of that has not been found, taught or suggested by the prior art of record, which makes these claims allowable over the prior art.

Art Unit: 2861

### **Communication With The USPTO**

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patel Vip can be reached on 571-272-2458. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*K. Feggins*  
K. FEGGINS  
PRIMARY EXAMINER